



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D4357-042
Job Sheet 177418



Part No: D4357-042

Job Qty: 4 ea

Part Name: Step, RH Crew



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 5/10/18

Job Tracking No:

Due Date: 5/31/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG REV A IPP REV:A NEW ISSUE 12-01-10 JLM VERIFIED BY:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	4 Ea	5/31/18	5/31/18	0.00	0.00	Start Up Large Fab-4		D.M.L 18-5-14
100	Large Fab	4 pcs	5/31/18	5/31/18	0.00	1.90	Large Fab 8		D.M.L 18-5-14
110	QC	4 pcs	5/31/18	5/31/18	0.00	0.00	QC6		PD 18-05-14
120	Large Fab	4 pcs	5/31/18	5/31/18	0.00	1.90	Large Fab 2		GPC
130	QC	4 pcs	5/31/18	5/31/18	0.00	0.00	QC9		PD 18-05-26
140	QC	4 pcs	5/31/18	5/31/18	0.00	0.00	QC5		PD 18-05-26
150	HandFinish	4 pcs	5/31/18	5/31/18	0.00	0.97	HandFinish1		SA 18-05-28
160	QC	4 pcs	5/31/18	5/31/18	0.00	0.00	QC3		GPC
170	Large Fab	4 pcs	5/31/18	5/31/18	0.00	1.90	Large Fab 2		DAS 18-5-28
180	QC	4 pcs	5/31/18	5/31/18	0.00	0.00	QC10		38 DAS
190	QC	4 pcs	5/31/18	5/31/18	0.00	0.00	QC5		3-89 38 9-89
200	HandFinish	4 pcs	5/31/18	5/31/18	0.00	0.97	HandFinish1		SA 18-05-31
210	Powdercoat	4 pcs	5/31/18	5/31/18	0.00	0.69	Powdercoat1		BL 18-5-31
211	QC	4 pcs	5/31/18	5/31/18	0.00	0.00	QC3		BL 18-5-31
215	HandFinish	4 pcs	5/31/18	5/31/18	0.00	0.97	HandFinish3		BL 18-5-31
220	QC	4 pcs	5/31/18	5/31/18	0.00	0.00	QC3		14 JUN 04 2018
230	Packaging	4 pcs	5/31/18	5/31/18	0.00	0.00	Packaging3-2	5426	9-89 JUN 04 2018
240	QC21-SA	4 Ea	5/31/18	5/31/18	0.00	0.00	QC21		DAS

Part Op 100 - 1-Cut D4357-1 using D2622 extrusion as per Dwg D4357 2-Drill, c/sink one hole on top of step as per dwg 3-Debur
Descriptions: and bevel ends for welding

120 - 1-Weld end cap (ONE END ONLY) 2-Grind end cap welds flush 3-weld lugs as per Dwg D4357

170 - 1-Inspect for foreign object per QSI 024 2-Weld Remaining end cap as per Dwg D4357 3-Grind end cap weld flush as per dwg D4357 4- install rivert as per dwg

M 138839 START: 2:50 O.V.T. 3:00 FINISH: 1:00

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D2622-120C	Step Extrusion	2400 Ea (.06 ea)	90-Start up Operation	5046116
D2734	Step End Plate	8 Ea (2 ea)	120-Large Fab	5063695
D3461-1	Mounting Plate	4 Ea (1 ea)	120-Large Fab	858756
D3461-3	Mounting Plate	4 Ea (1 ea)	170-Large Fab	5072107 1x B126300
MS20601-AD4W2	Rivet	4 Ea (1 ea)	170-Large Fab	5034004

Job Allocations

M.U. 003198

Plex 5/10/18 2:36 PM Dart.lajeunesse.marie

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	D2622-120C	0	167	0
120-Large Fab	D2734	8	44	0
	D3461-1	4	5	0
170-Large Fab	D3461-3	4	1	0
	MS20601-AD4W2	4	125	0
Part Specifications				
Specifications could not be found.				

Plex 5/10/18 2:36 PM Dart.lajeunesse.marie

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

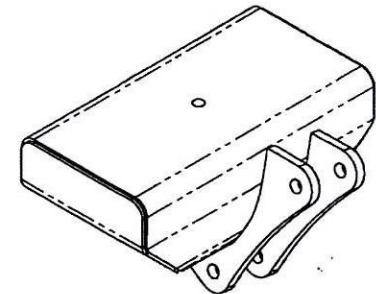
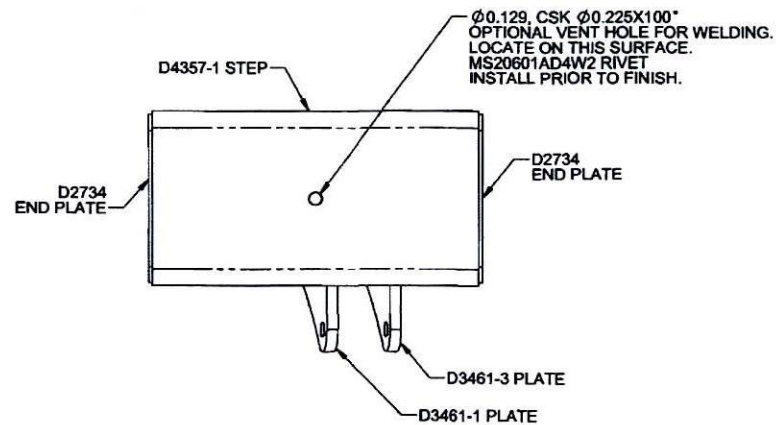


QA Closed: _____ Date: _____

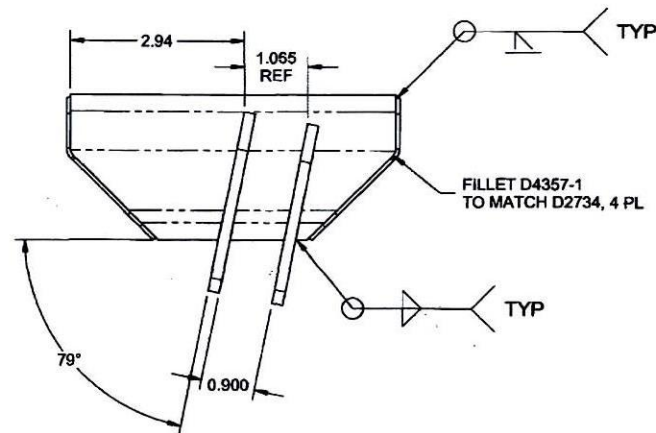
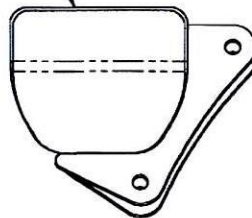
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Quality ☐ Other ☐						
Date : _____		Step #: _____		(2) Approval By _____ Supervisor Verification Coordinator Approval Part: D4357 - 042 Job No: 177418 Serial No/Batch: S071077 Revision: _____ Inspector: _____ Container No: S071077 DART Aerospace Ltd. 1270 Aberdeen Street Hamilton, ON K8A 1K7 CANADA TEL: 1 813 632-5200 Email: sales@dartaero.com www.dartaerospace.com						
Description Work Order Deviation		Date: 05/14/18								
Root Cause <table style="width:100%; font-size: small;"> <tr> <td style="width:50%;"> Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ </td> <td style="width:50%;"> No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐ </td> </tr> </table>		Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	<table style="width:100%; font-size: small;"> <tr> <td style="width:33%;"> Pressure/Force ☐ Bending ☐ Centre Not Con ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ </td> <td style="width:33%;"> Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ </td> <td style="width:33%;"> Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ </td> </tr> </table>				Pressure/Force ☐ Bending ☐ Centre Not Con ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐
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ITEM	QTY -042	P/N	DESCRIPTION
1	X	D4357-042	STEP, RH CREW
2	1	D4357-1	STEP
3	2	D2734	END PLATE
4	1	D3461-1	PLATE
5	1	D3461-3	PLATE
6	1	MS20601AD4W2	RIVET (OPTIONAL)



2) APPLY BLACK ANTI-SKID ON TOP SURFACE TO BOTTOM OF TOP RADIUS



D4357-042 STEP, RH CREW

RELEASED
2011-05-20
JM

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: P/N & B/N PER DART QSI 044 6.6 (REMOVABLE TAG)
- 7) WEIGHT: 0.47 lbs
- 8) WELDING: PER DART QSI 004

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D4357	REV. A
MFG. APPR.			SHEET 2 OF 3
APPROVED		TITLE STEP, CREW	SCALE
DE APPR.			NTS
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